General

Guideline Title

First-trimester abortion in women with medical conditions.

Bibliographic Source(s)

Guiahi M, Davis A, Society of Family Planning. First-trimester abortion in women with medical conditions. Contraception. 2012 Dec;86(6):622-30. [56 references] PubMed

Guideline Status

This is the current release of the guideline.

Recommendations

Major Recommendations

The levels of recommendations (A, B, C) are defined at the end of the "Major Recommendations" field.

Conclusions and Recommendations

Some serious, complex medical problems pose a dramatically increased risk for adverse health events during pregnancy. Early abortion care and effective postabortion care for women with such medical problems will reduce pregnancy-associated morbidity and mortality. To date, no Level A evidence supports clinical recommendations for care of women with medical conditions who are undergoing abortion. The authors offer guidance in the original guideline document on the basis of clinical experience combined with known features of coexisting conditions and abortion care.

On the basis of the highest level of evidence found in the data, recommendations are provided and graded according to the following categories:

Recommendations are based primarily on good and consistent scientific evidence (Level A):

- There is no Level A evidence to support the practice recommendations.

Recommendations are based primarily on limited or inconsistent scientific evidence (Level B):

- The dose of mifepristone should be increased above 200 mg when medical abortion is undertaken for women who are also being given inducers of the hepatic cytochrome p450 system.
- In steroid-dependent conditions, mifepristone's antiglucocorticoid properties necessitate an increase in usual steroid doses.

Recommendations are based primarily on consensus and expert opinion (Level C):

- Women with stable, controlled hypertension, diabetes, or asthma can be safely managed in an outpatient setting.
- Hospital-based abortion is recommended for women with certain medical conditions (see table below).
- Patients with high-risk cardiac conditions do not require additional antibiotics for the prevention of infective endocarditis.
- Surgical abortion is preferred for women who have a bleeding disorder or who are anticoagulated in the first trimester.

Table. Indications for Referral to Hospital-Based Provider

Central Nervous System	• Vascular–untreated aneurysm • Space occupying lesions
Renal Disease	• Impaired renal function (serum creatinine >2.5 mg/dL)
Hypertension	• Uncontrolled blood pressure (BP) (systolic BP >160 or diastolic BP >105)
Endocrine	• Uncontrolled hyperthyroidism, uncontrolled diabetes, pheochromocytoma
Cardiac	• Congenital (cyanotic disease, right ventricular [RV] or left ventricular [LV] dilation, uncontrolled tachyarrhythmia) • Coronary disease (history of myocardial infarction, treatment angina) • Cardiomyopathy (dilated, hypertrophic, history of peripartum cardiomyopathy) • Valvular disease (aortic stenosis [AS] peak gradient ≥60 mmHg, mitral stenosis [MS] valve area <1.5 cm^2, mitral regurgitation [MR] or aortic regurgitation [AR] with LV dilation)
Pulmonary	• Uncontrolled asthma • Restrictive lung disease • Pulmonary hypertension
Rheumatological	• Lupus flare • Lupus inhibitor requiring anticoagulation
Gastrointestinal (GI)	• Hepatic disease elevated prothrombin time (PT) • Esophageal varices with history of bleeding • Uncontrolled inflammatory bowel disease
Hematological	• Severe anemia • Sickle cell disease with a history of crisis • Idiopathic thrombocytopenia purpura with active thrombocytopenia • Thrombophilia requiring anticoagulation
Oncology	• Counseling regarding treatment options and timing of abortion • Gynecologic cancers restricting access to the uterus
Transplant	• Significantly impaired renal function (creatinine >2.5 mg/dL) • History of recent rejection • Poorly functioning transplanted organ

Psychiatric	• Inability to obtain informed consent • Inability to tolerate an outpatient procedure • History of suicide attempt

Definitions:

Levels of Recommendations

Level A: Recommendations are based primarily on good and consistent scientific evidence.

Level B: Recommendations are based primarily on limited or inconsistent scientific evidence.

Level C: Recommendations are based primarily on consensus and expert opinion.

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

- Unwanted pregnancy
- Co-existing medical conditions, including diabetes, hypertension, obesity, human immunodeficiency virus (HIV) infection, asthma, epilepsy, thyroid disease, and von Willebrand disease

Guideline Category

Evaluation

Management

Risk Assessment

Treatment

Clinical Specialty

Anesthesiology

Family Practice

Hematology

Internal Medicine

Obstetrics and Gynecology

Intended Users

Advanced Practice Nurses

Health Care Providers

Physician Assistants

Physicians

Public Health Departments

Guideline Objective(s)

To review the medical literature evaluating common approaches of providing first-trimester abortion care to women with coexisting medical conditions

Target Population

Women with medical conditions undergoing a first-trimester abortion

Interventions and Practices Considered

1. Considerations for hospital-based abortion care versus outpatient care
2. Choice of surgical abortion or medication abortion
3. Considerations for use of mifepristone, including contraindications for use
4. Special issues related to use of routine abortion medications
5. Considerations for common chronic conditions including diabetes, hypertension, obesity, human immunodeficiency virus (HIV) infection, asthma, epilepsy, thyroid disease, and von Willebrand disease
6. Anticoagulation management
7. Use of additional antibiotics at the time of abortion for high-risk patients to prevent infective endocarditis (not recommended)

Major Outcomes Considered

- Adverse effects of therapy
- Complications of treatment
- Morbidity and mortality
- Risk for adverse health events during pregnancy

Methodology

Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Primary Sources)

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

The authors used the PubMed database to identify publications related to first-trimester abortion and coexisting medical conditions between 1981 and 2011. They also identified articles related to medical problems in the context of general health, perioperative guidelines and pregnancy. In addition, the references of publications found through these databases were reviewed to capture any additional articles that may have been missed.

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Studies were reviewed and evaluated for quality according to the method outlined by the U.S. Preventive Services Task Force:

I: Evidence obtained from at least one properly designed randomized controlled trial.

II-1: Evidence obtained from well-designed controlled trials without randomization.

II-2: Evidence obtained from well-designed cohort or case–control analytic studies, preferably from more than one center or research group.

II-3: Evidence obtained from multiple time series with or without the intervention. Dramatic results in uncontrolled experiments also could be regarded as this type of evidence.

III: Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees.

Methods Used to Analyze the Evidence

Review

Review of Published Meta-Analyses

Description of the Methods Used to Analyze the Evidence

Not stated

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

Not stated

Rating Scheme for the Strength of the Recommendations

Levels of Recommendations

Level A: Recommendations are based primarily on good and consistent scientific evidence.

Level B: Recommendations are based primarily on limited or inconsistent scientific evidence.

Level C: Recommendations are based primarily on consensus and expert opinion.

Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

Internal Peer Review

Description of Method of Guideline Validation

These guidelines were reviewed and approved by the Board of Directors of the Society of Family Planning.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for each recommendation (see the "Major Recommendations" field).

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Appropriate management of first-trimester abortion in women with medical conditions

Potential Harms

- For all women seeking abortion, delays should be minimized because the safety of abortion is strongly related to gestational age, even in the first trimester. The mortality rate for women obtaining an abortion at ≤8 weeks was 0.1 per 100,000 legal induced abortions, compared with 0.4 per 100,000 legal induced abortions at ≤12 weeks. For women with medical problems, avoiding delays is particularly important because their condition may deteriorate with advancing pregnancy.
- Surgical abortion for obese women may be associated with increased technical difficulty and, for second-trimester procedures, with adverse outcomes such as increased blood loss; prompt care is therefore important. Ventilation difficulties with deep sedation may be more common with obese patients. Consultation with an anesthesiologist may be helpful. One study demonstrated that rates of undesired outcomes following medication abortion, such as surgical interventions, were similar across all body mass index (BMI) categories, suggesting that medication abortion may be the better option for obese women.
- When patients requiring anticoagulation medication(s) seek abortion, providers are faced with the clinical decision of whether to interrupt or modify therapy. Reversal of anticoagulation may decrease bleeding, but increase the risk of thromboembolism, particularly during pregnancy and especially with certain high-risk conditions (e.g., patients with cardiac valve replacement). Further, it may take several days to reverse anticoagulation, thereby delaying abortion. Women with a high risk of thrombosis maintained on warfarin may be transitioned to heparin, which can be held for surgery, and then warfarin may be restarted. This approach is time-consuming and complex.
- For patients on antiplatelet therapies such as aspirin and clopidogrel, the risk of bleeding must be carefully weighed against the risk of coronary artery ischemic events. Patients on combination antiplatelet therapy (i.e., clopidogrel and aspirin) face an increased risk of systemic bleeding.

Contraindications

Contraindications

- Methotrexate inhibits dihydrofolate reductase (DHFR), causing depletion of cofactors required for deoxyribonucleic acid (DNA) and

ribonucleic acid (RNA) synthesis. Based on its pharmacological action, methotrexate should not be administered in patients with evidence of immunodeficiency, moderate to severe anemia, leukopenia or thrombocytopenia, active pulmonary disease, active peptic ulcer disease, clinically important hepatic dysfunction or clinically important renal dysfunction.

- For women with medical conditions, absolute and relative contraindications to medication abortion drugs preclude their use in certain patients. Current labeling precautions related to the safety of medication abortion regimens for women with chronic medical conditions reflect the lack of available data; such patients have been excluded from clinical trials. Some of the contraindications listed (chronic adrenal failure, inherited porphyria, long-term corticosteroid therapy) relate to pharmacologic properties of medication abortion drugs and associated known or theoretical implications.
- Hemorrhagic disorders and concurrent anticoagulation therapy are listed as contraindications on the product labeling for Mifeprex® (Danco, New York, NY, USA).
- Inherited porphyria is listed as a contraindication to mifepristone.
- Mifepristone undergoes hepatic and renal metabolism; therefore, it is logical to avoid administration in patients with severe hepatic impairment or renal failure, given the concern for drug accumulation.
- Mifepristone medication abortion should be avoided in women with poorly controlled asthma on systemic glucocorticoid therapy.
- The use of ergot alkaloids is contraindicated for patients taking potent inhibitors of cytochrome P (CYP) 3A4 (which include protease inhibitors, azole antifungals and some macrolide antibiotics) and/or with hypertension.
- Carboprost tromethamine is contraindicated in patients with active cardiac, pulmonary, renal, or hepatic disease.
- Nonsteroidal anti-inflammatory drugs (NSAIDs) should be avoided in patients with thrombocytopenia or other preexisting platelet defects (e.g., von Willebrand disease), patients at risk of acute renal failure or gastrointestinal bleeding or patients with significant preexisting cardiovascular disease.
- The use of combined hormonal contraception is usually contraindicated for women with evidence of vascular disease or end-organ damage.

Qualifying Statements

Qualifying Statements

This evidence-based review should guide clinicians, although it is not intended to dictate clinical care.

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

Staying Healthy

IOM Domain

Effectiveness

Patient-centeredness

Safety

Timeliness

Identifying Information and Availability

Bibliographic Source(s)

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Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2012 Dec

Guideline Developer(s)

Society of Family Planning - Professional Association

Source(s) of Funding

The Society of Family Planning receives no direct support from pharmaceutical companies or other industries.

Guideline Committee

Not stated

Composition of Group That Authored the Guideline

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Financial Disclosures/Conflicts of Interest

Maryam Guiahi, M.D., M.S., and Anne Davis, M.D., M.P.H., report no significant relationships with industries relative to these guidelines.

Guideline Status

This is the current release of the guideline.

Guideline Availability

Electronic copies: Available from the Society of Family Planning Web site .

Availability of Companion Documents

None available

Patient Resources

None available

NGC Status

This NGC summary was completed by ECRI Institute on January 13, 2014. The information was verified by the guideline developer on February 10, 2014.

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